

Native and Inter-State Migrant Workers Wage Differential in Coir Units: A Special Reference from Pollachi Taluk, Coimbatore District

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ABSTRACT

Coir fibre and pith has received significant attention during the past two decades, especially in India, where coir-related production activities are expanding and developing on a daily basis. In detail, Indian coir units are important in rural and agro-based. Additionally, the number of registered coir units were increasing year by year also, more numbers of workers had employment opportunities in the coir units. In this study mainly focuses on growth of registered coir units in India, number of workers employed in the respondent units, and wage received by workers in the coir units in the Pollachi Taluk of Coimbatore District. This study was based on primary and secondary data and the samples were collected through stratified proportionate random sampling technique and the sample size were 94 coir unit owners. This study founds out the total registered coir unit's growth rate was increased 0.014 percentage from 2010-2011 to 2021-2022 and the number of migrant workers were high, compared to native workers in the selected coir units and there is a difference in the wage between inter-state migrant workers and native workers in the study region. The identified results gave more importance to ameliorate the inter-state migrant workers stance in the coir manufacturing units.

KEYWORDS: Coir units, Native and Inter-state migrant workers, Wage differential, Paired t-test

1. INTRODUCTION

Coir units is an important rural and agro-based traditional cottages in India. It is an employment and export-oriented units. which is originated in Kerala and spreading into other coconut growing states like Tamil Nadu, Karnataka, Andhra Pradesh, Telangana, Odisha, West Bengal, Pondicherry, Maharashtra, Delhi, Uttar Pradesh, North Eastern Region and Lakshadweep (Rajakumar, 2017). The coir units in India is diverse in nature, it involves the households, farmers, co-operatives, NGOs, manufacturers and exporters. Furthermore, Indian ministry of Micro, Small and Medium Enterprises are doing a vital role in economic growth because Reserve Bank of India, 2017 reports that, Micro, Small and Medium Enterprises contains more than 50 million and the enterprises generate employment to nearly 117 million people. Similarly, annual report of Coir Board 2021-2022, the coir industries alone 16,826 units registered and running around the various states in India and the coir industry employs more than 7,43,566 persons of whom a majority are from rural areas belonging to the economically weaker sections

of society. Additionally, 80 percent of the coir workers in the fibre extraction and spinning sectors are women (Mohanraj and Latha, 2017). The coir units are not only providing employment opportunities also, it earns foreign exchange through export of coir products. On the report of Ministry of Micro, Small and Medium Enterprises attains export increases to 37 per cent from previous year and it accounts 3778.98 crores in 2020-2021. In addition, Indian coir and coir products are exporting to 106 countries among all those countries USA, China are the top importers (The new Indian Express, 2021). However, coir unit owners are struggling for a manual assistance for coir related activities due to shortage of worker so, the coir unit owners are preferring migrant workers from various states in India. Further, in the respondent units has workers from various places like, native workers, inter-district and inter-state workers of India. In this study mainly focuses on growth of registered coir units in India, number of workers employed in the respondent units, and wage received by workers in the coir units in the Pollachi Taluk of Coimbatore District.

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2. Literature Review

Mohanraj and Latha (2017) executed a study in Sivagangai District. The author mainly aims to study on coir industries workers problems and prospects. The author examined the women workers satisfaction level and contributes suitable solutions to the problem in research area. The author used convenience sampling method and 100 samples were selected for this research. There are few statistical tools were used for this study like, chi-square test, weighted average and percentage analyses. The period of the study was carried out in the year of 2017 and month of April. The main reason to study the women coir workers was they were mostly rural background, illiterates and not aware of social position. Mostly they are all employed as a substitute and they were mostly forced to do their jobs. Sometimes the heavy work was not able to bearable. To know the level of satisfaction certain factors were tested like, salary, allowances, working condition, job security, industrial safety, welfare measure, working atmosphere, working nature and relationship with other workers. There are few hypotheses was tested. The results were a relationship between marital status, working experience, family size with satisfaction factors. The author finally suggested to provide the first aid facility, holidays, labour welfare and safe guard measures and improves the working environment.

Aswathy and Saranya (2018) executed a study in Alappuzha District, for coir industries Alleppey is the nerve center. The main objective of the study was to found that economic and social profile of coir workers in Cherthala taluk. Cherthala has a peculiar position in Alappuzha because of its huge manufacturing coir units. Through random sampling method 50 samples were collected from 5 coir industries. The primary data was collected via structured questionnaire and also secondary data gathered by way of journals and books. In this study pointed out that 33 percent of coir workers facing some health problems like Allergy and Asthma. Besides 45 percent of the respondent's income level below 5000. Moreover, 95 percent of coir workers belongs to Hindu, out of Hindus 85 percent are Ezhavas, one of the major finding was 40 percent of the total working population are engaged in coir industry during 10th plan. In the 12th plan 15 percent decreased in total working population in coir industry. In Kerala alone nearly 6.4 lakhs workers receive employment opportunity from coir industry among 80 percent are women workers. Hence the researcher conclude that coir industry is almost associated with women empowerment.

2. **Ashik (2018)** has made a survey of coir workers in the districts of Alappuzha and Kollam in Kerala. Economic stability and repay debts are main objective of this study. He collected 100 samples from each district totally 200 samples were gathered via organized questionnaire the samples were chosen Randomly. The major finding of the research was technological backwardness in coir industries and also coir workers facing health-oriented problems like lung diseases and Allergy. Through chi-square analysis the hypothesis was tested and the researcher found there is a relationship between wages and satisfaction in daily requirements. The study also identified that in coir industries traditional way of workers are excluded, majority of the coir workers are support traditional way of spinning. At last workers from coir industries experiencing various problems. Those issues are not properly spoken by government and coir board.

3. Methodology

Tamil Nadu is one of the major coir fibres producing state next to Kerala, compared to other states. It has been fore front of coir manufacturing during the past two decades. At present, 80 per cent of the coir fibre requirement of Kerala's rope making units are being met from Tamil Nadu. In that Coimbatore District, Pollachi Taluk has high number of registered coir units were located as per regional coir board of pollachi so, it was considered as study area. This study is based on primary and secondary data. The samples were collected through stratified proportionate random sampling technique and the sample size were 94 coir unit owners. The secondary sources were collected from Coconut Board, Coir Board (Regional Office Pollachi), Micro Small Medium Enterprises (MSMEs), Central coir research Institute (CCRI), Indian Council of Agricultural Research (ICAR), Ministry of Agriculture and Welfare, Food and Agriculture Organization (FAO). Some of the information's are collected directly and also through website. It will be used to understanding the national, state and district wise scenarios of coir industries.

4. Results and Discussion

In general, industries were promoting the growth of agriculture, transport and communication. It also enables the country to produce a variety of consumer goods in large quantities and at low costs. Additionally, industries were eliminating our dependence on other countries for the supply of essential goods. Likewise, people provide their labour to industries in exchange for wages, and they trade their unpaid leisure time for paid work time to make a living and to be able to purchase goods and services.

These information's were proving that industries and worker were essential features for economic growth. Furthermore, Table 4.1 shows the coir unit registration status of top five states in India. In that,

percentage change over previous year and compound annual growth rate was used based on the secondary information's gathered from the annual report of coir board from 2010-2011 to 2021-2022.

Table 4.1: Registered coir units in India from 2010-2011 to 2021-2022

Year	K	%	TN	%	AP	%	O	%	KA	%	OS	%	Total	%
2010-11	8693	-	3490	-	674	-	702	-	540	-	201	-	14300	
2011-12	8744	0.59	3626	3.90	685	1.63	721	2.71	656	21.4	205	1.99	14637	2.36
2012-13	8773	0.33	3733	2.95	730	6.57	772	7.07	670	2.13	207	0.98	14885	1.69
2013-14	8790	0.19	3824	2.44	760	4.11	797	3.24	682	1.79	207	0.00	15060	1.18
2014-15	8814	0.27	3941	3.06	770	1.32	806	1.13	692	1.47	212	2.42	15235	1.16
2015-16	9108	3.34	4150	5.30	910	18.1	875	8.56	698	0.87	235	10.85	15976	4.86
2016-17	9125	0.19	4249	2.39	955	4.95	876	0.11	701	0.43	236	0.43	16142	1.04
2017-18	9135	0.11	4288	0.92	962	0.73	905	3.31	712	1.57	238	0.85	16240	0.61
2018-19	9139	0.04	4335	1.10	990	2.91	922	1.88	720	1.12	249	4.62	16355	0.71
2019-20	9181	0.46	4406	1.64	993	0.30	933	1.19	723	0.42	259	0.42	16495	0.86
2020-21	9215	0.37	4542	3.09	999	0.60	938	0.54	727	0.55	285	0.55	16706	1.28
2021-22	9244	0.31	4618	1.67	1000	0.10	946	0.85	728	0.14	292	0.14	16826	0.72
CAGR	0.005		0.024		0.033		0.025		0.025		0.032		0.014	

Source: Annual Report of Coir Board from 2010-2011 to 2021-2022

Note: % - Percentage change over from previous year, K-Keral, TN-Tamil Nadu, AP-Andhra Pradesh, O-Orisa, KA-Karnataka, OS-Other States, CAGR-Compound Annual Growth Rate

The above Table 4.1 unveils the coir unit registration trajectory in top five coir related products producing states in India. In overall, compound annual growth rate was 0.014 from 2021 to 2022. In all these years the percentage of coir unit registration was increasing at decreasing rate but not in the negative percentage change over from previous year from above mentioned states like, Kerala, Tamil Nadu, Andhra Pradesh, Orissa, Karnataka and other states. Mainly, all these coir units were agro-based and located in the rural areas. In addition, helps in the upliftment of the rural economy via employment generation and trading the raw materials from the coconut farmers. Moreover, last decade plays an vital role for coir industries growth and the government was made so much effort were taken through schemes to transform the coir industries from cottages to small-scale industries also, technological advancement in each production stages were helped to create the innovative value-added coir products in the market.

Table 4.2: Number of workers employed

Unit Classification	Statistics	Number of workers from						Average total number of workers employed	
		Native (Pollachi)		Inter-district (Tamil Nadu)		Inter-state (India)		Male	Female
		Male	Female	Male	Female	Male	Female		
Fibre extraction unit	Sum	71	228	0	0	73	43	144	271
	Mean	2.96	9.50	0.0	0.0	6.63	3.90	6.00	11.29
	N	24	24	24	24	11	11	24	24
Pith unit	Sum	64	174	0	0	152	80	208	274
	Mean	3.76	10.24	0.0	0.0	10.13	5.33	12.24	16.12
	N	17	17	17	17	15	15	17	17
Both fibre extraction and pith unit	Sum	205	448	73	89	339	174	617	711
	Mean	3.87	8.45	9.12	11.12	8.2	4.24	11.64	13.42
	N	53	53	8	8	41	41	53	53
Total	Sum	340	850	73	89	564	297	969	1256
	Mean	3.62	9.04	1.38	1.68	8.4	4.43	10.31	13.36
	N	94	94	8	8	67	67	94	94

Source: Primary Data (2023)

Figures in () parenthesis shows the row wise percentage

Figures in [] parenthesis shows the column wise percentage

The Table 4.2 draw attention to the number of workers recruited in the respondent units. Also, the reason for recruiting the inter-state and inter-district migrant workers and mentioned the name of inter-states details. In the respondent units, workers are from various places, like those surrounding the industry (native workers) and other states and districts (inter-state and inter-district migrant workers). On average, the total number of workers in each respondent unit was 10 males and 13 female workers. Most respondent units depend more on native workers, with 3.62 males and 9.04 female workers. In the scenario of inter-district workers, only 8 combined units were recruited from Nilakottai in Dindigul District. In that sense, each sample unit consists of 9.12 male and 11.12 female workers. Additionally, 11 fibre extraction units, 15 pith units, and 41 combined units have recruited the inter-state workers. On average, each industry consists of 8 male and 4 female inter-state migrant workers.

Table 4.3: Reason for recruiting the inter-state and inter-district migrant workers and mentioned the inter-state details

Unit classification	Reason for recruiting the inter-state and inter-district migrant worker							Mention the inter-states				Total
	24 hours workers availability	No disputes with owners	Takes leave rarely	Low wages	High working efficiency	Native workers are not willing to work	No other state workers	Orissa	Bihar	Uttar Pradesh	No other state	
Fibre extraction unit	2 (8.3) [12.5]	0 (0.0) [0.0]	2 (8.3) [33.3]	4 (16.7) [20.0]	1 (4.2) [14.3]	2 (8.3) [14.3]	13 (54.2) [48.1]	1 (4.2) [5.0]	9 (37.5) [25.7]	1 (4.2) [8.3]	13 (54.2) [48.1]	24 (100) [25.5]
Pith unit	6 (35.3) [37.5]	1 (5.9) [25.0]	0 (0.0) [0.0]	5 (29.4) [25.0]	0 (0.0) [0.0]	3 (17.6) [21.4]	2 (11.8) [7.4]	3 (17.6) [15.0]	6 (35.3) [17.1]	6 (35.3) [50.0]	2 (11.8) [7.4]	17 (100) [18.1]
Both fibre extraction and pith unit	8 (15.1) [50.0]	3 (5.7) [75.0]	4 (7.5) [66.7]	11 (20.8) [55.0]	6 (11.3) [85.7]	9 (17.0) [64.3]	12 (22.6) [44.4]	16 (30.2) [80.0]	20 (37.7) [57.1]	5 (9.4) [41.7]	12 (22.6) [44.4]	53 (100) [56.4]
Total	16 (17.0) [100]	4 (4.3) [100]	6 (6.4) [100]	20 (21.3) [100]	7 (7.4) [100]	14 (14.9) [100]	27 (28.7) [100]	20 (21.3) [100]	35 (37.2) [100]	12 (12.8) [100]	27 (28.7) [100]	94 (100) [100]

Source: Primary Data (2023)

Figures in () parenthesis shows the row wise percentage

Figures in [] parenthesis shows the column wise percentage

Majority of inter-state migrations in India are from economically under-developed states. According to the 2011 Census, Uttar Pradesh, Bihar, Rajasthan and Madhya Pradesh accounted for around half of the total inter-state migrants. These states have the highest incidence of poverty, and lag behind in human development. Most inter-state migrants face challenges of low wages, adverse employment conditions, inadequate onsite living conditions, and almost absent social protection. Table 4.3 Most of the inter-state migrant workers come from Bihar (37.2 percent), Orissa (21.3 percent), and Uttar Pradesh (12.8 percent); the remaining 28.7 percent of the respondent units do not have inter-state migrant workers. The main reasons for recruiting inter-state and inter-district migrant workers were low wages (21.3 percent), 24-hour worker availability (17 percent), high working efficiency (7.4 percent), taking leave rarely (6.4 percent), and no disputes with owners (4.3 percent). The remaining 28.7 percent of the respondent units did not have inter-state migrant workers. In the field, the native workers were jobless due to inter-state and inter-district migrant workers in the respondent units.

Table 4.4: Nearby village, other state/district employee wages

Unit classification	Wage differentiation between native workers and inter-state migrant worker			Statistics	Wage for native worker (per day/ per shift)		Wage for inter-state and inter-district migrant workers (per day/ per shift)	
	Yes	No other state and district worker	Total		Male	Female	Male	Female
Fibre extraction unit	11 (45.8) [16.4]	13 (54.2) [48.1]	24 (100) [25.5]	Sum Mean N	11340 472.50 24	7750 322.92 24	2800 254.54 11	1845 167.72 11
Pith unit	15 (88.2) [22.4]	2 (11.8) [7.4]	17 (100.0) [18.1]	Sum Mean N	7900 464.71 17	5380 316.47 17	3760 250.66 15	3120 208 15
Both fibre and pith unit	41 (77.4) [61.2]	12 (22.6) [44.4]	53 (100) [56.4]	Sum Mean N	23340 440.38 53	16940 319.62 53	11645 284.02 41	8155 198.90 41
Total	67 (71.3) [100]	27 (28.7) [100]	94 (100) [100]	Sum Mean N	42580 452.98 94	30070 319.89 94	18205 271.71 67	13120 195.82 67

Source: Primary Data (2023)

Figures in () parenthesis shows the row wise percentage

Figures in [] parenthesis shows the column wise percentage

The Table 4.4 reveals the wage details of workers in the respondent units. Firstly, the field investigator has collected basic information about the wage difference between native and inter-district or inter-state workers. The results show that 67 respondent units (100 percent) had wage variations identified, and the remaining 27 units did not have inter-state or inter-district migrant workers. On average, workers from surrounding areas get a wage of Rs. 452.98 per day for males and Rs. 319.89 for females. The wage for inter-state and inter-district migrant male workers was Rs. 271.71, and female workers received Rs. 195.82 daily. Inter-district and inter-state migrant workers were receiving low wages compared to native workers. Because in the sample unit, other than native workers, those remaining were getting free accommodation and provisions for cooking.

5. Hypothesis Testing

There is a variation between native workers and inter-state migrant workers wage in the selected coir units.

Null Hypothesis (H_0): There is no significant variation between native workers and inter-state migrant workers wage in the selected coir units.

Alternative Hypothesis (H_1): There is significant variation between native workers and inter-state migrant workers wage in the selected coir units.

Table 5.1: Paired t-test for wage differentiation between native and inter-state migrant workers

Wage differentiation between native and inter-state migrant workers		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Wage per day for native male worker -	31202.13	94	19283.722	1988.964
	Wage per day for inter-state male migrant worker	18914.89	94	11517.784	1187.969
Pair 2	Wage per day for native female worker -	19755.32	94	12757.192	1315.804
	Wage per day for inter-state female migrant worker	10851.06	94	6815.475	702.963

Table 5.2: Significance results of paired t-test

Pairs	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	259.309	146.254	15.085	229.353	289.264	17.190	93	.000
Pair 2	180.319	119.533	12.329	155.836	204.802	14.626	93	.000

*Note: significance at 1% level

The paired sample t-test, sometimes called the dependent sample t-test. It is used to determine whether the change in means between two paired observations is statistically significant or not. Here, the subject wage was measured between native workers and inter-state migrant workers in same coir units. In total 94 observations are taken in to the account and wage details are collected separately for male and female. Before applying the paired t-test, researcher was tested the pre-observation of same variables and the results of paired variables are continuous and normally distributed. Furthermore, the subjects are classified into two pairs namely, Pair 1 (wage per day for native male worker – wage per day for inter-state male migrant worker) and Pair 2 (wage per day for native female worker – wage per day for inter-state female migrant worker). In the analysis, mean and standard deviation of the paired differences and sample size was taken to calculate the significance level. From Table 5.2, wage of native workers and inter-state migrant workers paired differences (mean \pm standard deviation) were 259.309 ± 146.254 and 180.319 ± 119.533 . Paired sample t-test indicated that mean difference of paired observations of wage difference between native workers and inter-state migrant workers was statistically significant ($P < 0.001$). Here, based on the P value null hypothesis was rejected and alternate hypothesis was accepted at 1 % significance level.

6. Conclusion

The research findings were concluding that, inter-state migrant worker was facing a lot of problems when compared to native workers in the coir units. Most of the inter-state migrant workers were working for long hours without any of the safety measures for very low wage in the hazardous working condition. Additionally, this kind of unhealthy working environment causes the inter-state migrant workers health and they could not get affordable treatment for occupational health cause with their wage from coir unit because inter-state migrant workers were receiving the low wages from the coir unit owners. To overcome this kind of issues, coir board authorities

should take preventive measures and the preventive measures will elevate the coir workers stance in the society as well as working place.

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